

REMARKS

The Office examined claims 1-17 and rejected same. With this paper, claims 1, 5, 11-13 and 15 are amended and claim 14 is canceled without prejudice. The application now includes 16 claims.

Claim Objections

Claims 11, 13 and 15 are objected to due to informalities. With this paper, claims 11, 13 and 15 are amended according to the instructions of the Office.

Claim Rejections under 35 USC §102

At page 2, section 4 of the Office Action, claims 12 and 14 are rejected under 35 USC §102(b) as being anticipated by Kuwahara (European Patent Application EP 1 164 383 A2).

In rejecting claim 12, the Office asserts that Kuwahara teaches a mobile station (MS) comprising means for receiving signals from a plurality of network elements (BS₀, BS₁, BS₂) of a network for determining the location of said mobile station (MS) and an indication of a search window for each of said network elements (BS₀, BS₁, BS₂), and means for determining a delay of received signals using a respective search window.

In Kuwahara, a "window" is a time period that includes a series of samples around a specific reference time, and samples are the signals from different base stations for determining location of a mobile station. Although Kuwahara teaches that the size of a window is varied depending on the distribution of the base stations, only one window is defined in detecting signals from base stations surrounding a mobile station. This is illustrated in Figures 5 and 6 of Kuwaraha.

In the instant application, a search window is determined for each of the network elements (BS₀, BS₁, BS₂). The search window is determined based on location information available for a specific network element (e.g. BS₁) and on a known distance of said mobile station (MS) to at least one other network element (e.g. BS₀). This is distinctively different from Kuwahara.

Claim 12 is amended to particularly point out and claim a mobile station (MS) that comprises means for receiving signals from a plurality of network elements (BS₀, BS₁, BS₂) of a network for determining the location of said mobile station (MS) and an indication of a separate

search window for each of said network elements (BS₀, BS₁, BS₂). Support of the amendment can be found in page 11, line 15 to page 13, line 7, and Figs. 3a to 3c of the instant application.

Claim 12 is also amended to include the phrase "whereby the search window for each of said network elements increases an acquisition probability for said received signals." Support of this clause can be found on page 6, second paragraph of the instant specification.

It is therefore respectfully submitted that the currently amended claim 12 is distinguished over Kuwahara. Applicant respectfully requests the rejection of claim 12 be reconsidered and withdrawn.

Claim 14, as noted above, is canceled.

Claim Rejections under 35 USC §103

At page 3, section 6 of the Office Action, claims 1, 2, 7, 8, 9, 11, 13, 15, 16 and 17 are rejected under 35 USC §103(a) as being unpatentable over Kuwahara in view of Soliman (US Patent Application Publication No. 2003/0114172).

At page 7, section 7 of the Office Action, claims 3 and 4 are rejected under 35 USC §103(a) as being unpatentable over Kuwahara in view of Soliman, and further in view of Uhlik (US Patent No. 6,760,599).

At page 9, section 8 of the Office Action, claim 10 is rejected under 35 USC §103(a) as being unpatentable over Kuwahara in view of Soliman, and further in view of Bayley (US Patent No. 6,775,252).

Claim 1 recites a method for estimating a delay of a signal received at a mobile station from a network element of a network for determining the location of the mobile station. The delay is estimated within a search window. The search window is determined based on location information available for the network element, and on a known distance of the mobile station to at least one other network element. Claim 1 is amended to state that the search window increases an acquisition probability of the received signal. Support for this amendment is found in the specification, including page 6, lines 10-14.

In rejecting claim 1, the Office asserts that Kuwahara teaches estimating a delay within a search window, and the window is determined based on location information of the network

element. However, the Examiner acknowledges that Kuwahara does not disclose that the search window is also determined based on a known distance of the mobile station to at least one other network element. The Office states that the feature not disclosed by Kuwahara is taught by Soliman.

Applicant respectfully submits that Soliman teaches conducting a pilot signal search in a wireless communication network. The location of a mobile is determined within the network. This location is then used in determining search window sizes and other search parameters information that is used to search all pilot signals identified in a designated pilot signal set. Soliman emphasizes that: "To perform the method, the approximate location of the mobile must be known." (See Paragraph [0052].) In the same paragraph, Soliman also mentions that the approximate location of a mobile could be determined by mobile location determination techniques known in the art.

Therefore, Soliman cannot be considered as combinable with Kuwahara, because the method of Soliman requires knowledge of the location of a mobile terminal as a prerequisite, while the method of Kuwahara is aimed at finding such location information.

Claim 1 is amended to state that the search window increases an acquisition probability for said signal. This requirement of claim 1 is not suggested by Kuwahara, whether taken alone or in combination with Soliman. Both Kuwahara and Soliman are silent about any acquisition probability associated with a search window.

In view of the above, applicant respectfully submits that, claim 1 as amended is not obvious in view of Kuwahara further in view of Soliman. Applicant respectfully requests the rejection of claim 1 under 35 USC §103(b) be reconsidered and withdrawn.

Claims 2-4 and 7-10 are dependent claims of claim 1. Since claim 1 is believed to be allowable for the reasons given above, these claims are also believed to be allowable. Applicant respectfully requests the rejections of claims 2-4 and 7-10 under 35 USC §103(b) be reconsidered and withdrawn.

The application further comprises claim 11, directed at a mobile station, claim 13, directed at a network element, and claim 15, directed at a communication system. Each of the claims 11, 13 and 15 comprises means for realizing or supporting the method of claim 1. Claims 16 and 17 are dependent on claim 15. Since claim 1 is believed to be allowable for the reasons given above,

claims 11, 13, and 15-17 are also believed to be allowable. Applicant respectfully requests the rejections of claims 11, 13, and 15-17 under 35 USC §103(b) be reconsidered and withdrawn.

Allowable Subject Matter

At page 9, section 9 of the Office Action claims 5 and 6 are objected to as being dependent upon a rejected base claim (claim 1), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 5 is now presented in independent form and includes the limitations of the base claim and any intervening claims. It is therefore allowable as is claim 6, which depends from claim 5.

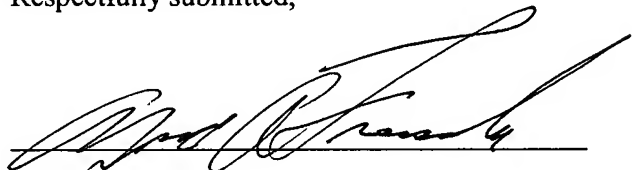
Conclusion

For all the foregoing reasons it is believed that all of the claims of the application are now in condition for allowance, and their passage to issue is earnestly solicited. Applicant's attorney urges the Examiner to call to discuss the present response if anything in the present response is unclear or unpersuasive.

Respectfully submitted,

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